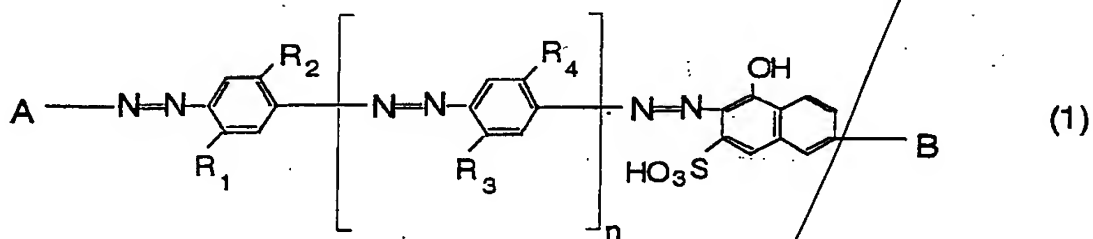
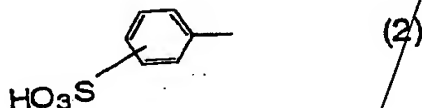


Claims:

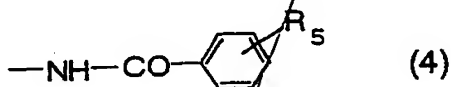
1. A polyvinyl alcohol type polarizing film containing, in a substrate for the polarizing film, a water soluble dye represented by the following formula (1) in the form of a free acid:



[where A represents the following formula (2)]



B represents the following formula (4) when A represents the formula (2);

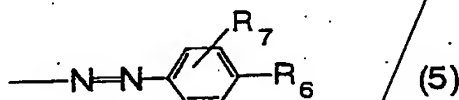


and n is 1, R₅ in the formula (4) represents an amino group or a hydroxyl group, or

A represents the following formula (3)

$$\text{X}-\text{C}_6\text{H}_3(\text{SO}_3\text{H})-\text{CH}=\text{CH}-\text{C}_6\text{H}_4\text{SO}_3\text{H} \quad (3)$$

{where X represents a nitro group or an amino group}, B represents the following formula (5) when A represents the formula (3):



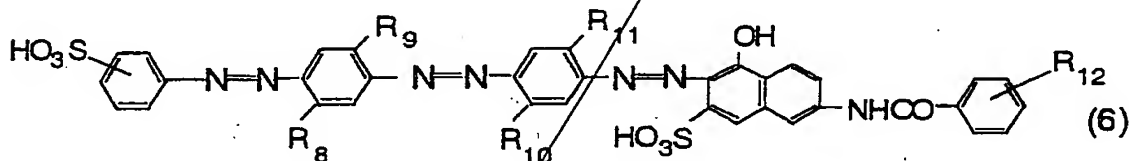
and n is 0 or 1 {where R₆ represents a hydrogen atom, hydroxyl group, substituted or unsubstituted amino group, methyl group, ethyl group, methoxy group or ethoxy group, R₇ represents a hydrogen atom, hydroxyl group, substituted or unsubstituted amino group, methyl group, ethyl group, methoxy group or ethoxy group in the formula (5)}, R₁, R₂, R₃, R₄ each independently represents a hydrogen atom, methyl group, ethyl group, methoxy group, ethoxy group and acetyl amino group, on the proviso of excluding the case where all of R₁, R₂, R₃ and R₄ are methyl group or methoxy group and the case where R₁ and R₃ are methyl group and R₂ and R₄ are methoxy group when n is 1, A represents the formula (2) and B represents the formula (4)] 12
or a copper complex/salt dye thereof.

2. A polyvinyl alcohol type polarizing film as defined in claim 1, containing at least one of the water soluble dye

represented by the formula (1) or the copper complex salt thereof and at least one of organic dyes other than above.

3. A polyvinyl alcohol type polarizing plate having a protective film on the surface of the polyvinyl alcohol type polarizing film as defined in any one of claim 1 or 2. 112

4. Apolarizing film for polyvinyl alcohol for a green channel used for a liquid crystal projector containing in a substrate for a polarizing film, a water soluble dye represented by the following formula (6): 112



where (R_8 , R_9 , R_{10} , and R_{11} each represents a hydrogen atom, methyl group, ethyl group, methoxy group, ethoxy group and acetyl amino group. (R_{12} represents a hydrogen atom, amino group or hydroxyl group) in a free acid form and having a maximum absorption wavelength (λ_{max}) of 520 nm or more and less than 580 nm.

5. Apolarizing film for polyvinyl alcohol for a green channel used for a liquid crystal projector containing at least one of water soluble dyes represented by the formula (6) as defined in claim 4 and at least one of organic dyes other than described

above.

6. A polarizing plate for polyvinyl alcohol for a green channel used for a liquid crystal projector as defined in claim 4 or 5 wherein the average light transmittance for the crossed state at 630 nm to 780 nm is 60% or more. 112

7. A polarizing plate for polyvinyl alcohol for a green channel used for a liquid crystal projector having a protective film on the surface of a polyvinyl alcohol type polarizing film as defined in claim 4.

8. A color liquid crystal projector having the polarizing plate as defined in claim 7 in a green channel portion. 112,

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